

### **REMARKS**

Favorable reconsideration and allowance of the present application in view of the foregoing amendments and the following remarks are respectfully requested.

Claims 36-40, 42-63, and 65-69 remain in the present application, including independent claims 36, 53, 61, and 69. Claims 1-35 were previously cancelled. Claims 36 and 61 have been amended in this paper, while claims 41 and 64 have been cancelled in this paper.

Independent claim 36, as amended, is directed to a process that comprises providing a superabsorbent material capable of absorbing at least about 20 grams of an aqueous solution per gram of the superabsorbent material. A paper web is formed from a cellulosic fibrous material and the superabsorbent material, wherein the superabsorbent material comprises from about 0.1% to about 3% by weight of the paper web. The paper web is at least partially dried and is incorporated into a tissue product, wherein the tissue product is formed primarily from the paper web and optionally one or more additional paper webs. The tissue product has a basis weight less than about 100 grams per square meter.

In the Final Office Action, independent claims 36, 53, 61, and 69 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,651,862 to Anderson, et al. The Anderson, et al. patent is directed to an absorbent, wet-formed composite that comprises a combination of fibers and absorbent material. The absorbent material is desirably swellable in the absorbent medium. The composite is suitable for use in products such as diapers, feminine care products, adult incontinence products, wound dressings, training pants, wipes, and mats. (Col. 10, lines 21-29). When the absorbent composite is employed in diapers, for instance, the composites are suitably sandwiched between a liquid-pervious bodyside liner and a liquid-impervious outer cover. (Col. 10, lines 21-29).

At pages 2 and 3, the Final Office Action cites various parts of the specification of Anderson, et al. as anticipating the pending claims. However, Applicants respectfully submit that Anderson, et al. fails to disclose various limitations of independent claims 36, 53, 61, and 69. For example, these independent claims each require the formation of a *tissue product*, such as facial tissue, bath tissue, paper towels, and so forth. (See,

e.g., Appl. p. 5, lines 18-28). As noted in Applicants' previous response, the presently claimed tissue products differ greatly from the absorbent products formed according to Anderson, et al. For instance, as reflected by the current independent claims, "tissue products" are relatively lightweight and are formed primarily from paper webs to provide optimum absorbency. To the contrary, the absorbent products contemplated by Anderson, et al. (such as diapers and training pants) are generally of a higher basis weight than tissue products and contain additional components not typically included in tissue products, such as fluid-impervious liners.

At page 3, the Office Action refers to the wet-formed composite of Anderson, et al., stating that "[t]he composite may be a tissue product" and citing column 6, lines 34-40 of the Anderson, et al. specification. Applicants respectfully submit that this portion of Anderson, et al. does *not* disclose or suggest that the wet-formed composite of Anderson, et al. may be a tissue product. Specifically, this portion of Anderson, et al. refers to scanning electron photomicrographs of two prior art laminates discussed in Comparative Examples 1 and 3 at columns 12 and 13 of Anderson, et al. Comparative Example 1 discloses forming a laminate structure "according to the prior art" by providing a bottom wet-laid fiber sheet, applying a 75 grams per square meter layer of absorbent material onto this bottom fiber sheet, covering the absorbent material with a second fiber sheet identical to the bottom sheet, and compressing and drying the laminate structure, whose resulting basis weight is about 165 grams per square meter. FIG. 2 is a cross-sectional scanning electron photomicrograph of this laminate structure. (Col. 12, lines 35-55). Similarly, Comparative Example 3 describes a commercially available laminate consisting of two air-formed pulp sheets and a 75 grams per square meter layer of absorbent material, where the laminate has a basis weight of about 396 grams per square meter. FIG. 3 is a cross-sectional scanning electron photomicrograph of this laminate material. (Col. 13, lines 1-14).

Returning to the portion of Anderson, et al. cited at the top of page 3 of the Office Action (column 6), it describes how the photomicrographs of the "prior art laminates" of FIGS. 2 and 3 (Comparative Examples 1 and 3) show "much less mixing and, therefore, less contact between the fibers of the *tissue sheet* and the absorbent material" when compared to FIG. 1. (Emphasis added). This mention of "tissue sheet" with respect to

the two prior art laminates does not disclose or even suggest that the wet-formed composite of the invention of Anderson, et al. may be a tissue product formed primarily from one or more low basis weight paper webs as presently claimed by the Applicants. Rather, this disclosure in Anderson, et al. attempts to show the advantages of its wet-formed composites, for example, the composite shown in the scanning electron photomicrograph of FIG. 1 where the absorbent material "is in intimate contact with the fibers" and where "the fibers are seen to extend generally throughout the entire thickness of the wet-formed composite."

Thus, the portion of Anderson, et al. cited in the Office Action (col. 6, lines 34-40) re-emphasizes the points made at the top of column 6 that "by combining the absorbent material and fiber slurry prior to formation of the wet-formed composite, a *composite* possessing improved performance properties can be produced." (Col. 6, lines 1-4) (emphasis added). And this *composite* of Anderson, et al. is not a tissue product, but rather (1) is suitable for use in absorbent products such as diapers, feminine care products, adult incontinence products, wound dressings, training pants, wipes, and mats, and (2) has advantages over prior art laminates where absorbent material is merely sandwiched between two pre-formed layers of fiber sheets.

Furthermore, as shown at pages 2 and 4 of this paper, independent claims 36 and 61 have been amended to require that the superabsorbent material comprise from about 0.1% to about 3% by weight of the paper web. As explained in the previous response filed on May 19, 2003, Applicants have discovered that even minute amounts of a superabsorbent material can significantly improve the absorbent capacity of the tissue product when utilized in accordance with the present invention. For example, the present specification describes how a superabsorbent material present in an amount of only about 1% by weight can increase the absorbent capacity of the tissue by about 15%. (Appl. p. 7, lines 13-25).

Conversely, Anderson, et al. states that the absorbent material is present in its wet-formed composites in an amount of from 5% to 95%, desirably from about 35% to about 95%, preferably from about 60% to about 95%, and most preferably, from about 70% to about 90%. (Col. 5, lines 18-23). These high levels of absorbent material are particularly significant when considering the differences between the absorbent

products contemplated by Anderson, et al. and the tissue products of the present claims. For example, Anderson, et al. seeks to provide wet-formed composites that are suitable for products such as diapers and feminine care products. Wet-formed composites suitable for such higher basis weight absorbent products need to have improved performance properties, such as the substantial containment of the absorbent material "*even at relatively high concentrations of the absorbent material* relative to the concentration of fiber" which is difficult to achieve in prior art laminates wherein absorbent material is merely sandwiched between two pre-formed layers of fiber sheets. (Col. 6, lines 4-18) (emphasis added). Thus, an important goal of Anderson, et al. is providing wet-formed composites that can contain even relatively high concentrations of absorbent material. In contrast, such high levels of superabsorbent material would likely have an adverse affect on the integrity and strength of a "tissue product" that is formed according to Applicants' present invention primarily from one or more paper webs and that has a basis weight of less than about 100 grams per square meter, as required by the present claims.

The Final Office Action specifically asserts that the above-referenced disclosure from column 5 of Anderson, et al. allowing for the absorbent material to be present in the wet-formed composite in an amount of from about 5% to 95% "reads on the upper limit of 'about 3% by weight' of the present invention range." (Office Action, pp. 2-3). Applicants respectfully submit that the disclosure of Anderson, et al. does not anticipate the presently claimed range of from about 0.1% to about 3%. An interpretation of "from about 5%" in Anderson, et al. to include "about 3%" as presently claimed would result in the inclusion of an amount of absorbent material that is *20% lower than* the weight percentage of "about 5%." Furthermore, from looking at the specification of Anderson, et al., the preferred embodiments involve the absorbent material being present in the composite in an amount of from about 70% to about 90% based on the total weight of the fibers and absorbent material present in the wet-formed composite. (Col. 5, lines 18-23).

Additionally, all of the Examples of Anderson, et al., specifically, Examples 1-6 at columns 10-12, describe wet-formed composites that include from 37 (Example 2) to 76 (Examples 4 and 5) weight percent absorbent material, based on total weight of the

bone dry composite. The disclosure of Anderson, et al. fails to provide any examples of wet-formed composites that include weight percentages of absorbent material even close to 5%. Therefore, the claim limitation in Applicants' amended claims, requiring the superabsorbent material to comprise from about 0.1% to about 3% by weight of the paper web, is not anticipated by the disclosure of Anderson, et al. Furthermore, as explained in detail above, the differences in the amount of superabsorbent material included in the paper web in the present invention are *not* the only differences between the claims of the present invention and Anderson, et al. Again, the required incorporation of the paper web of the present claims into a low basis weight *tissue product* constitutes an important patentable distinction of the present claims over the disclosure of Anderson, et al.

In short, Anderson, et al. simply fails to disclose the combined features of a superabsorbent material in an amount of from about 0.1% to about 3% by weight of a paper web that is incorporated into a *tissue product* formed primarily from one or more paper webs and having a basis weight of less than about 100 grams per square meter. For at least these reasons, Applicants respectfully submit that independent claims 36, 53, 61, and 69 patentably define over Anderson, et al.

In the Final Office Action, dependent claims 37-52, 54-60, 62-65, and 67-68 were rejected under 35 U.S.C. § 102(b) as being anticipated by Anderson, et al. Additionally, dependent claim 66 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Anderson, et al. in view of U.S. Patent No. 6,416,624 to Nielsen. Applicants respectfully submit, however, that at least for the reasons indicated above relating to corresponding independent claims 36, 53, 61, and 69, claims 37-52, 54-60, and 62-68 patentably define over the references cited. However, Applicants also note that the patentability of dependent claims 37-52, 54-60, and 62-68 does not necessarily hinge on the patentability of independent claims 36, 53, 61, and 69. In particular, it is believed that some or all of these dependent claims may possess features that are independently patentable, regardless of the patentability of claims 36, 53, 61, and 69.

In summary, Applicants respectfully submit that the present claims patentably define over all of the prior art of record for at least the reasons set forth above. As such, it is believed that the present application is in complete condition for allowance and favorable action, therefore, is respectfully requested. Should any issues remain after consideration of this Amendment, Examiner Halpern is invited and encouraged to telephone the undersigned at his convenience. Otherwise, Applicants respectfully request that a timely Notice of Allowance be issued in this case.

Please charge any additional fees required by this Amendment to Deposit Account No. 04-1403.

Respectfully submitted,

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